

STATEMENT OF BASIS (AI No. 139452)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0122653 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Patterson Services, Inc.
Patterson Rental Tools
15015 Vickery Dr.
Houston, TX 77032

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Maxon Graham

DATE PREPARED: 31 January 2007

1. PERMIT STATUS

A. Reason For Permit Action: First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. LPDES permits – LPDES permit effective date: N/A
LPDES permit expiration date: N/A

C. Date Application Received: 22 December 2006

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - Oilfield Service Company - Patterson Rental Tools is a proposed facility which rents tools and equipment to the oil and gas industry. This facility proposes to discharge treated sanitary wastewater. The equipment washwater will be recirculated in a closed loop system.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II – BPJ to 0 points due to minimal flow
3. Wastewater Type: III
4. SIC code: 1389

C. LOCATION - 1081 Alliet Road in Broussard, St. Martin Parish
Latitude 30° 04' 33', Longitude 91° 56' 39'

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: treated sanitary wastewater
Treatment: mechanical treatment plant with aeration and clarification
Location: at the point of discharge from the sewage treatment plant on the east side of the Mega Building.
Flow: 1500 gpd
Discharge Route: via local drainage to LaSalle Coulee

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Outfall 002

Discharge Type:	treated sanitary wastewater
Treatment:	mechanical treatment plant with aeration and clarification
Location:	at the point of discharge from the sewage treatment plant northwest of the pipe cleaning building
Flow:	1000 gpd
Discharge Route:	via local drainage to LaSalle Coulee

4. RECEIVING WATERS

STREAM - via local drainage to LaSalle Coulee

BASIN AND SEGMENT - Vermilion-Teche Basin, Segment 060801

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- f. agriculture

5. TMDL STATUS

Subsegment 060801, Vermilion River – headwaters at Bayou Fusilier – Bourbeaux junction to New Flanders (Ambassador Caffery) Bridge, HWY 3073, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for suspended solids/turbidity/siltation, carbofuran, Nitrate + Nitrite (as N), organic enrichment/low DO, pathogen indicators and phosphorus, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

To date, the following TMDLs have been completed: *Vermilion River Dissolved Oxygen and Nitrogen TMDL* (Federal Register Notice: Volume 66, Number 66, pages 18087-18089 (4/5/2001)), *Vermilion River Fecal Coliform TMDL* (Federal Register Notice: Volume 66, Number 66, pages 18087-18089 (4/5/2001)), *TMDL for TSS, Turbidity and Siltation for the 15 subsegments in the Vermilion River Basin* (Federal Register Notice: Volume 67, Number 85, pages 22080 - 22082 (5/2/2002)), *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion Teche - River Basins* (Federal Register Notice: Volume 67, Number 55, pages 13144 - 13145 (3/21/02)).

Carbofuran is NOT among the effluent characteristics for discharges of sanitary wastewater, therefore the discharge should have no adverse impact on the existing uses of the receiving water body nor should it cause or contribute to the violation of state water quality standards.

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As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for phosphorus. Therefore, requirements for total phosphorus will not be placed in this permit.

Suspended solids/turbidity/siltation are among the effluent characteristics for discharges of sanitary wastewater, however as per the EPA's TMDL *Siltation for the 15 Subsegments in the Vermilion River Basin*, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required.

Organic enrichment/low DO, Nitrate + Nitrite (as N) are among the effluent characteristics for discharges of sanitary wastewater, however as per the EPA's *Vermilion River Dissolved Oxygen and Nitrogen TMDL*, the limits apply to sanitary discharges, and process outfalls of food processors and seafood processors. For discharges less than 25,000 GPD, secondary limits shall apply as per the TMDL. Potential organic enrichment/low dissolved oxygen and nutrient impairments shall be addressed through the BOD parameter.

Pathogen Indicators are among the effluent characteristics for discharges of treated sanitary wastewater, however as per *The Vermilion River Fecal Coliform TMDL*, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL. The pathogen indicators impairment shall be addressed through the fecal coliform parameters.

Therefore, the discharge from this facility should not cause or contribute to the violation of water quality standards for organic enrichment/low DO, phosphorus, suspended solids/turbidity/siltation, pathogen indicators, and nitrogen in the receiving stream.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

7. COMPLIANCE HISTORY/COMMENTS

- A. Compliance History - No records of compliance actions were found.
- B. DMR Review/Excursions - No DMR data were available for review since this is a first time issuance.

8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060801 of the Vermilion-Teche Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

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9. HISTORIC SITES

The discharge will be from a proposed facility (expansion). LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated December 28, 2006, to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response letter, dated February 1, 2007, stated that the facility as proposed will have no potential effects.

10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.
Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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Rationale for Patterson Services, Inc.

1. Outfall 001, 002 – Treated sanitary wastewater (estimated flow -1500 gpd from 001; 1000 gpd from 002)

Parameter	Limitation		Reference
	Monthly Average	Weekly Average	
BOD ₅	---	45 mg/L	LAG530000; similar discharges
Fecal Coliform Colonies/100 mL	---	400	LAG530000; similar discharges
Flow	---	Report	LAG530000; similar discharges
TSS	---	45 mg/L	LAG530000; similar discharges
pH – Allowable Range (su)	6.0 (min)	9.0 (max)	LAG530000; similar discharges

Treatment: mechanical treatment plant with aeration and clarification

Monitoring Frequency: semiannually at the point of discharge from the sewage treatment plant prior to mixing with waters of the state.

Limits Justification: limits and monitoring frequencies are based on BPJ, current guidance for similar discharges from other industrial facilities, and the Class I Sanitary General Permit, LAG530000 effective December 1, 2002.

BPJ Best Professional Judgment
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 1389 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).